account of the genus *Protypotherium.* This animal was of about the size of a *Sh/rax,* which indeed it resembles in several points of structure. The teeth have the primitive number of forty-four, and they are close set, leaving no diastema; the molars are rootless and grow persistently; they are simple and Rodent-like in surface pattern. The shape of the lower jaw is like that of *Hyrcux^* being rounded in outline posteriorly; there is no projecting angle as in the Hodents, and this remark applies to the Typotheria in general. The aspect of the Rodent lower jaw is characteristically different from that of *J3kfra®* and the forms under consideration.

Some other characters of these early forms of Typotheria can be gathered from an inspection of other genera. In *IcocJiilus* both hand and foot were five-toed, and, as in ancient Ungulates generally, the bones of the wrist and of the ankle are serially and not alternately arranged. Moreover, an os cent rale is present in the carpus. Both thumb and big toe were opposable. The skull has a remarkably Hodent-like appearance, but the palate is not so narrowed as in these animals.

In the more recent forms of Typotheria the dentition has become reduced. The canines are lost, and as the incisors are reduced also, to one on each side of the upper, and two on each side of the lower jaw, the likeness to a Hodent skull is increased. There is also evidence of a modification from the more primitive forms in the loss of one premolar or even more, in the alternating bones of the carpus, in the disappearance of the centrale, and in the loss of a toe upon the hind-foot. In these more recent forms the fibula articulates with the astragalus instead of with the calcaneum. Typotheria of these more recent forms may be illustrated by the typical genus *Typotlieriwrn.* It has the reduced dental formula I-J- C -g Pm -J- M f-; the molars are simple in pattern, and much like those of *To&odon.* The tipper incisors are powerful and curved, but are surrounded by a layer of enamel, which is not limited to the anterior face, as it practically is in

Hodents. The sacrum is composed of a large number of vertebrae—some seven—a state of affairs which recalls the Edentata. The shoulder blade is not Ungulate in form. It has a strong spine, with an acromion and a well-developed metacromion, The terminal phalanges are enlarged and hoof-like.

In the genus *Pachyrucos* there are three premolars, otherwise